Claim 15 (original)

The stacked-gate flash memory of Claim 12, wherein said second part of said floating gate includes polysilicon.

Claim 16 (original)

The stacked-gate flash memory of Claim 12, wherein said dielectric layer includes oxide/nitride/oxide.

Claim 17 (original)

The stacked-gate flash memory of Claim 12, wherein said dielectric layer includes oxide/nitride.

REMARKS/ARGUEMENT

This present amendment is in response to the Office Action mailed September 11, 2003, and the correspondence form Examiner. Claims 12 through 17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Tsong-Minn Hsieh (U.S. Patent No. 6,326,263 B1) in view of Chia-Ta Hsieh et al (U.S. Patent No. 6,153, 494 B1).

Claims 12 through 17 remains in the application. No claims are amended herein. Claims 1 through 11 are cancelled. No claims are added. Accordingly, Claims 12 through 17 remains pending.

ELECTION/RESTRICTION

The Examiner confirmed the Applicant's election to prosecute Claims 12 through 17 and the withdrawal of Claims 1 through 11 without prejudice. Applicant reserves the right the file a divisional

application covering the subjected matter of the non-elected claims.

SPECIFICATION AMENDMENT-IN GENERAL

In brief, the main change to the specification is included in the Embodiment, which replaced "February 11, 1998" with -- May 12, 1999 -- in page 3; amended "hallow" with -- shallow-- after the word "forming" in line 19 of page 3; inserted reference number –16-- between the word "control gate" and "is" in line 1 of page 7; deleted unnecessary reference number "14" after polysilicon in line 2 of page 9; replaced reference number "14" with --12-- in line 13 and line 16 of page 9; and added recitation --layer 12-- after the word "polysilicon" in line 20 of page 9.

These changes for consideration are consistent with the drawings as original filed. It is respectfully submitted that the change is clearly supported by the original drawings and description of the application, and therefore does not constitute any new matter.

AMENDMENT TO CALIMS

In brief the main substantive changes to the claims include the replaced the word "gate" with --oxide-- after the word "tunneling" in the line 2 of page 14 to Claim 12. It is respectfully submitted that these changes are clearly supported by the description of the application, and therefore do not constitute any new matter.

Applicant respectfully requests reconsideration in light of the

above amendments and the following remarks.

SPECIFICATION OBJECTION

With respect to Page 3 of the Office Action, the Examiner objected Specification.

The Examiner is of the opinion that disclosure is objected to because of the following informalities: Page 3, line 19, "hallow" should be changed to --shallow--; Page 9, line 2, "14" should be delete; and Page 9, line 12, "14" should be changed to --12--. Thus, Applicant has been thoroughly amended specification that is no new matter should be entered

CLAIM REJECTIONS- 35 U.S.C. SECTION 103 (a)

With respect to Page 3 through Page 5 of the Office Action, the Examiner rejected Claims 12-17 under 35 U.S.C. Section 103 (a) as being unpatentable over Tsong-Minn Hsieh (U.S. Patent No. 6,326,263 B1) in view of Chia-Ta Hsieh et al (U.S. Patent No. 6,153,494 B1). Of the rejected claims, only Claim 12 is independent.

Applicant respectfully traverses these rejections.

The Examiner is of the opinion that Tsong-Minn Hsieh disclosed a stacked-gate flash memory comprising: a substrate having a trench formed therein; a tunneling oxide formed on a surface of the substrate and adjacent to the trench; a first part of a floating gate formed on the tunneling; a raised isolation filler (HDP oxide) formed in the trench

and protruding over an upper surface of the first part of the floating gate, thereby forming a cavity between two adjacent raised isolation filler; a second part of the floating gate formed along a surface of the a dielectric layer conformally on a surface of the second part of the floating gate; and a control gate formed on the dielectric layer. The Examiner agree with that Tsong-Minn Hsieh did not disclosed the cavity to have a U-shaped structure in cross sectional view, wherein the high level of the U-shaped structure is the same with the one of the raised isolation filler.

However, Examiner alleges that Chia-Ta Hsieh teach the method wherein the cavity to have a U-shaped in cross sectional view, wherein the high level of the U-shaped structure is the same with one of the raised isolation filler.

Regards to amended claim, the difference between the amended claim and the combination of the disclosure of Tsong-Minn Hsieh in view of Chia-Ta Hsieh is that the recitation "a second part of said floating gate formed along a surface of said cavity to have a U-shaped structure in cross sectional view, wherein the **high level** of said U-shaped structure is the **SAME** with the one of said raised isolation filler", and also refer to FIG. 4, "**the second part of floating gate (12) has the same level with the raised isolation.**" Nevertheless, Tsong-Minn Hsieh disclosed the height of the second part of floating gate (26) is **"HIGHER"** than the protruding (as shown in FIG. 7).

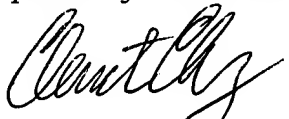
Moreover, refer to FIG. 3C of Chia-Ta Hsieh, the high level of the U-shaped is **HIGHER** than the raised isolation filler, therefore, the

high-level of the U-shaped structure is **NOT** same with the one of the raised isolation filler. Thus, the combination of the disclosure of Tsong-Minn Hsieh and Chia-Ta Hsieh cannot achieve the present invention.

Conclusion

In the light of the above amendments and remarks, Applicants respectfully submit that all pending Claims 12 through 17 as currently presented are in condition for allowance. Applicant has thoroughly reviewed that art cited but relied upon by the Examiner. Applicant has concluded that these references do not affect the patentability of these claims as currently presented. Accordingly, reconsideration is respectfully requested.

Respectfully submitted.



Clement Cheng, Esq.
Plaza Del Lago Building
17220 Newhope St #127
Fountain Valley, CA 92708
www.clemcheng.com